

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Currently Amended) A white balance correcting device for correcting white balance of a picked-up image signals, comprising:

an image pickup device which picks-up image signals of an image pick-up plane;

a dividing part which divides a scope of the image pick up plane into a plurality of blocks;

a peak value acquiring part which acquires a peak value of brightness and color signal values corresponding to the peak value of brightness obtained in each of all of the plurality of blocks divided by said dividing part;

an average value calculating part which calculates an average value of brightness and average values of color signal values obtained in each of all of the plurality of blocks divided by said dividing part;

a comparison part which makes comparison between brightness information of the average value and the peak value;

a selection part which selects either of the values obtained by said average value calculating part or the values obtained by said peak value acquiring part according to comparison result by said comparison part; ~~and~~

a white balance control part which controls white balance on the basis of the values selected by said selection part; and

wherein said comparison part computes comparison between a first integral value obtained by integrating average values obtained by said average value calculating part and a second integral value obtained by integrating peak values obtained in the scope by said peak value acquiring part, and,

wherein said selection part selects the values obtained by said peak value acquiring part if the second integral value is not less than a predetermined number of times the first integral value, and said selection part selects the value obtained by said average value calculating part if the second integral value is less than the predetermined number of times the first value.

Claim 2 (Canceled).

Claim 3 (Currently Amended) A white balance correcting device according to claim 2 1, further comprising:

a white determining part which determines whether the average value of color signal values calculated by said average value calculating part and the color signal values corresponding to the peak value of brightness acquired by said peak value acquiring part exist within a white range,

wherein said comparison part integrates values which have been determined to exist within the white range by said white determining part, in order to obtain the first integral value and the second integral value.

Claim 4 (Previously Presented) A white balance correcting device according to claim 1, wherein said peak value acquiring part acquires peak values of image signals from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of the image signals picked-up by said image pick-up device.

Claim 5 (Previously Presented) A white balance correcting device according to claim 1, wherein said peak value acquiring part acquires the peak value from signals that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to a signal level of the image signals picked-up by said image pick-up device.

Claim 6 (Currently Amended) A white balance correcting device for correcting white balance of a picked-up image signal, comprising:

an inputting part which inputs picked-up image signal of an image pick-up plane;

a dividing part which divides a scope of the image pick up plane into a plurality of blocks;

a peak value acquiring part which acquires a peak value of brightness and color signal values corresponding to the peak value of brightness obtained in each of all of the plurality of blocks divided by said dividing part;

an average value calculating part which calculates an average value of brightness and average values of color signal values obtained in each of all of the plurality of blocks divided by said dividing part;

a comparison part which makes comparison between brightness information of the average value and the peak value;

a selection part which selects either of the values obtained by said average value calculating part or the values obtained by said peak value acquiring part according to the comparison result by said comparison part; and

a white balance control part which controls white balance on the basis of the values selected by said selection part; and

wherein said selection part selects the values obtained by said peak value acquiring part if the peak value is not less than a predetermined number of times the average value, and said selection part selects the values obtained by said average value calculating part if the peak value is less than the predetermined number of times the average value.

Claim 7 (Canceled).

Claim 8 (Currently Amended) A white balance correcting method for correcting white balance of a picked-up image signals, comprising:

picking-up image signals of an image pick-up plane;

dividing a scope of the image pick-up plane into a plurality of blocks;

acquiring a peak value of brightness and color signal values corresponding to the peak value from the image signals obtained in each of all of the plurality of blocks divided in the dividing step;

calculating an average value of brightness and average values of color signal values from the image signals obtained in each of all of the plurality of blocks divided in the dividing step;

making comparison between brightness information of the average value and the peak value;

selecting either of the values obtained in said average value calculating step or the values obtained in said peak value acquiring step according to comparison result; ~~and~~

controlling white balance on a basis of the values selected in said selection step;

and

wherein, in making comparison, computing a ratio between first integral value obtained by integrating average values obtained in said average value calculating step and a

second integral value obtained by integrating peak values obtained in said peak value acquiring step.

wherein, the values obtained in said peak value acquiring step is selected by said selection if the second integral value is not less than a predetermined number of times the first integral value, and the values obtained in said average value calculating step is selected by said selection if the second integral value is less than the predetermined number of times the first integral value.

Claim 9 (Canceled).

Claim 10 (Currently Amended) A white balance correcting method according to claim 9 8, further comprising:

determining whether the average value of color signal values calculated in said color average value calculating step and the color signal values corresponding to the peak value acquired in said peak value acquiring step exist within a white range,

wherein values which have been determined to exist within the white range in said white determining step are integrated to obtain the first integral value and the second integral value.

Claim 11 (Previously Presented) A white balance correcting method according to claim 8, wherein peak values of the image signals are acquired in said peak value acquiring step from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of the image signals picked-up in said image picking-up step.

Claim 12 (Previously Presented) A white balance correcting method according to claim 8, wherein peak values of the image signals are acquired in said peak value acquiring step from

signals that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to a signal level of the image signals picked-up in said image picking-up step.

Claim 13 (Currently Amended) A white balance correcting method for correcting white balance of a picked-up image, comprising:

inputting a picked-up image signals of an image pick-up plane;

dividing a scope of the image pick up plane into a plurality of blocks;

acquiring peak value of brightness and color signal values corresponding to the peak value obtained in each of all of the plurality of blocks divided in the dividing step;

calculating an average value of brightness and average values of color signal values obtained in each of all of the plurality of blocks divided in the dividing step;

making comparison between information of the average value and the peak value;

selecting either of the values obtained in said average value calculating step or the values obtained in said peak value acquiring step according to comparison result; and

controlling white balance on the basis of the values selected by said selection;

and

wherein, the values obtained in acquiring a peak value step is selected by said selection if the peak value is not less than a predetermined number of times the average value in making comparison, and the value obtained in calculating an average value step is selected by said selection if the peak value is less than the predetermined number of times the average value in making comparison.

Claim 14 (Canceled).

Claim 15 (Currently Amended) A storage medium which stores therein a program for executing a process for correcting white balance of a picked-up image signals, said process comprising:

picking-up image signals of an image pick-up plane;

dividing a scope of the image pick up plane into a plurality of blocks;

acquiring a peak value of brightness and color signal values corresponding to the peak value from the image signals obtained in each of all of the plurality of blocks divided in the dividing step;

calculating an average value of brightness and average values of color signal values from the image signals obtained in each of all of the plurality of blocks divided in the dividing step;

making comparison between brightness information of the average value and the peak value;

selecting either of the values of obtained in said average value calculating step or the values obtained in said peak value acquiring step according to comparison result; and

controlling white balance on a basis of the values selected in said selection step;

and

wherein, in making comparison, computing a ratio between first integral value obtained by integrating average values obtained in said average value calculating step and a second integral value obtained by integrating peak values obtained in said peak value acquiring step,

wherein, the values obtained in said peak value acquiring step is selected by said selection if the second integral value is not less than a predetermined number of times the first

integral value, and the values obtained in said average value calculating step is selected by said selection if the second integral value is less than the predetermined number of times the first integral value.

Claim 16 (Canceled).

Claim 17 (Currently Amended) A storage medium according to claim ~~16~~ 15, wherein said process further comprises:

determining whether the average value of color signal values calculated in said color average value calculating step and the color signal values corresponding to the peak value acquired in said peak value acquiring step exist within a white range;

wherein values which have been determined to exist within the white range in said white determining step are integrated to obtain the first integral value and the second integral value.

Claim 18 (Previously Presented) A storage medium according to claim 15, wherein peak values of the image signals are acquired in said peak value acquiring step from signals that have beforehand been subjected to limitation for setting an upper limit to a signal level of the image signals picked-up in said image picking-up step.

Claim 19 (Previously Presented) A storage medium according to claim 15, wherein peak values of the image signals are acquired in said peak value acquiring step from signals that have beforehand been subjected by a low-pass filter to limitation for setting an upper limit to a signal level of the image signals picked-up in said image picking-up step.

Claim 20 (Currently Amended) A storage medium which stores therein a program for executing a process for correcting white balance of a picked-up image signals, said process comprising:

inputting a picked-up image signal of an image pick-up plane;
dividing a scope of the image pick-up plane into a plurality of blocks;
acquiring a peak value of brightness and color signal values corresponding to the
peak value of brightness obtained in each of all of the plurality of blocks divided in the dividing
step;

calculating an average value of brightness and average values of color signal
values obtained in each of all of the plurality of blocks divided in the dividing step;

making a comparison between brightness information of the average value and
the peak value;

selecting either of the values obtained in said average value calculating step or
the values obtained in said peak value acquiring step according to the comparison result in said
comparison step; and

controlling white balance control part which controls white balance on the basis
of the values selected by said selection step; and

wherein said selection step selects the values obtained by said peak value
acquiring step if the peak value is not less than a predetermined number of times the average
value, and said selection step selects the values obtained by said average value calculating step
if the peak value is less than the predetermined number of times the average value.

Claim 21 (Canceled).

Claim 22 (Canceled).